

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for forming a substantially isodiametric lead having a prescribed diameter and at least one electrode separated from at least one terminal by a lead body, wherein the at least one electrode is electrically coupled to the at least one terminal by a conductor passing through a passage defined by the lead body, comprising the steps of:

assembling the at least one electrode and the at least one terminal relative to the lead body to form an assembly, including connecting the at least one electrode to the at least one terminal via the conductor;

over-molding the assembly with a first material to form an intermediate assembly, wherein the first material is compatible with and has mechanical properties consistent with a second material of the lead body; and

removing at least a portion of the first ~~all~~ material of the intermediate assembly in excess of the prescribed diameter of the lead, where the lead comprises the at least one electrode, the at least one terminal and the lead body.

2. (Original) A method in accordance with Claim 1, wherein the at least one electrode has an outer diameter greater than the prescribed diameter prior to the removing step.

3. (Original) A method in accordance with Claim 1, wherein the at least one terminal has an outer diameter greater than the prescribed diameter prior to the removing step.
4. (Original) A method in accordance with Claim 1, wherein the removing step involves subjecting the intermediate assembly to at least a centerless grinding process.

5. (Currently Amended) A method for forming a substantially isodiametric lead having a prescribed diameter and a first region separated from a second region by a lead body, the first region having a plurality of terminals, each terminal being respectively and electrically joined to at least one electrode by a conductor passing through a passage defined by the first region, second region, and lead body, comprising the steps of:

assembling the ~~plurality of electrodes and~~ plurality of terminals relative to the lead body to form an assembly, this step including electrically coupling each terminal to at least one ~~electrode by a conductor~~; and

unitizing at least that portion of the assembly corresponding to the first region of the lead, wherein subsequent to unitization, each ~~electrode~~ terminal is separated by a first insulative material and the passage defined by at least the first region is substantially filled with the first insulative material.

6. (Currently Amended) A method in accordance with Claim 5, further comprising unitizing that portion of the assembly corresponding to the second region of the lead, wherein subsequent to unitization, each electrode ~~terminal~~ is separated by a third ~~second~~ insulative material, and the passage defined by at least the first region is substantially filled with the third ~~second~~ insulative material.

7. (Currently Amended) A method in accordance with Claim 6, wherein the third ~~second~~ insulative material has mechanical properties consistent with the first insulative material ~~of the~~ lead body.

8. (Currently Amended) A method in accordance with Claim 5, wherein the second insulative material has mechanical properties consistent with the first insulative material ~~of the~~ lead body.

9. (Currently Amended) A method for forming a substantially isodiametric lead having a prescribed diameter and a first region separated from a second region by a lead body, the first region having a plurality of electrodes, and the second region having a plurality of terminals, each terminal being respectively and electrically joined to at least one electrode by a conductor passing through ~~a passage defined by~~ the first region, second region, and lead body, comprising the steps of:

assembling the plurality of electrodes ~~and plurality of terminals~~ relative to the lead body to form an assembly, this step including electrically coupling each electrode terminal to at least one ~~electrode by a conductor; and~~

unitizing at least that portion of the assembly corresponding to the first region of the lead, wherein each electrode is separated by an first insulative material, and ~~the passage defined by at least~~ the first region is substantially filled with the first insulative material[[,]];

~~wherein the step of unitizing involves over-molding the assembly with a second material to form an intermediate assembly, wherein the second material is compatible with and has mechanical properties consistent with the insulative material of the lead body.~~

over-molding at least that portion of the assembly corresponding to the first region of the lead with a second insulative material to form an intermediate assembly; and

removing a portion of the second insulative material of the intermediate assembly in excess of the prescribed diameter of the lead.

10. (Currently Amended) A method in accordance with Claim 9, wherein the second insulative material and the first insulative material are the same.

11. (Currently Amended) A method in accordance with Claim 9, wherein the second insulative material has mechanical properties consistent with the first insulative material. ~~further comprising the step of removing all material of the intermediate assembly in excess of the prescribed diameter.~~

12. (Currently Amended) A method in accordance with Claim ~~9~~ 11, wherein the step of removing involves subjecting the intermediate assembly to at least a centerless grinding process.

13. (Currently Amended) A method in accordance with Claim ~~9~~ 11, wherein ~~the~~ at least one of the plurality of electrodes ~~electrode~~ has an outer diameter greater than the prescribed diameter prior to the removing step.

14. (Currently Amended) A method in accordance with Claim 11, wherein ~~the~~ at least one of the plurality of terminals ~~terminal~~ has an outer diameter greater than the prescribed diameter prior to the removing step.

15. (New) A method in accordance with Claim 5, wherein the removing step includes subjecting the intermediate assembly to at least a centerless grinding process.

16. (New) A method for forming a lead assembly comprising the steps of:

assembling at least one terminal assembly, wherein the at least one terminal assembly comprises at least one terminal that is connected to at least one conductor, wherein the conductor passes through a lead body, the lead body comprising a first material;

over-molding the terminal assembly with a second material, wherein the second material is compatible with and has mechanical properties consistent with the first material; and

removing at least a portion of the second material to a prescribed diameter.

17. (New) A method in accordance with Claim 16, wherein the removing step includes subjecting the terminal assembly to at least a centerless grinding process.

18. (New) A method in accordance with Claim 16, wherein the at least one terminal has an outer diameter greater than the prescribed diameter prior to the removing step.

19. (New) A method in accordance with Claim 16, further comprising the step of assembling at least one electrode to form an electrode assembly, wherein the at least one electrode is

electrically coupled to the at least one terminal by a conductor passing through a lead body, and wherein the lead body is between the electrode assembly and the terminal assembly.

20. (New) A method in accordance with Claim 19, further comprising the step of over-molding the electrode assembly with a third material, wherein the third material is compatible with and has mechanical properties consistent with the first material.